

Appl. No. 09/744,678  
Art Unit 1616  
July 23, 2004  
Reply to Office Action of April 27, 2004

**REMARKS**

In the present application, claims 1, 6-8, 13-20 and 27-34 are pending. Claims 18, 32 and 34 have been amended. Claim 18 deletes the reference to the ester linkage. Claim 32 has been amended into independent form by incorporating the subject matter of claim 18. And claim 34 has been amended by incorporating the subject matter of the base claim, which is claim 1. Thus, no new matter has been added.

It is respectfully requested that the present Reply be entered into the Official File in view of the fact that the Reply automatically places the application in condition for allowance. Thus, the present Reply is believed to be in proper form for placing the application in condition for allowance.

The amended claims present no new issues requiring further search or consideration because claims of the same or similar scope has previously been presented and subsequently examined. For instance, claim 34 as amended into the independent form is the same scope as earlier presented in its dependent form.

In the alternative, if the Examiner continues with the rejections of the present application, it is respectfully requested that the present Reply be entered for purposes of an Appeal. The Reply reduces the issues on appeal by reducing the number of claims and/or overcoming some of the rejections under 35 U.S.C. § 103(a) in view of the newly submitted Declaration. Thus, the issues on appeal would be reduced.

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Based upon the above considerations, entry of the present amendment is respectfully requested.

In view of the following remarks, Applicants respectfully request that the Examiner withdraw all rejections and allow the currently pending claims.

***Issues Under 35 U.S.C. § 103(a)***

Claims 1, 15, 17, 19 and 29 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over JP '010 (JP Publication No. JP 54020010 A).

Also, claims 1, 15, 17 and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over JP '856 (JP Publication No. JP 07291856 A).

In addition, claims 1, 14, 17, 19 and 29 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over JP '707 (JP Publication No. JP 55083707 A).

Finally, claims 1, 13, 17, 19 and 29 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over JP '185 (JP Publication No. JP 59189185 A).

Applicants respectfully traverse each of these rejections, and reconsideration and withdrawal of all rejections are respectfully requested.

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A Prima Facie Case of Obviousness Has Not Been Established

Applicants respectfully maintain (see Applicants' reply of January 22, 2004) that the rejections have been overcome since the references are in non-analogous arts, wherein JP '010 is directed to a food product, JP '856 is directed to a skin disease-treating medicine, JP '707 is directed to a skin-protection and JP '185 is directed to a different usage of water-treatment. Still, the Examiner states that the recited uses (i.e., plant freshness-keeping; see page 3, last two lines of the Office Action as an example) for the claimed compositions are not given patentable weight in order to overcome the present rejections. In response, Applicants respectfully refer the Examiner to *In re Oetiker*, wherein the Federal Circuit stated:

We have reminded ourselves and the PTO that it is necessary to consider "the reality of the circumstances", *In re Wood*, 599 F.2d 1032, 1036, 202 USPQ 171, 174 (CCPA 1979) -- in other words, common sense -- in deciding in which fields a person of ordinary skill would reasonably be expected to look for a solution to the problem facing the inventor. It has not been shown that a person of ordinary skill, seeking to solve a problem of fastening a hose clamp, would reasonably be expected or motivated to look to fasteners for garments. The combination of elements from non-analogous sources, in a manner that reconstructs the applicant's invention only with the benefit of hindsight, is insufficient to present a *prima facie* case of obviousness. There must be some reason, suggestion, or motivation found in the prior art whereby a person of ordinary skill in the field of the invention would make the combination. That knowledge can not come from the applicant's invention itself.

24 USPQ2d 1443, 1446 (Fed. Cir. 1992) (citing *Diversitech Corp. v. Century Steps, Inc.*, 850 F.2d 675, 678-79, 7 USPQ2d 1315, 1318 (Fed.

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Cir. 1988); *In re Geiger*, 815 F.2d 686, 687, 2 USPQ2d 1276, 1278 (Fed. Cir. 1987); *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1147, 227 USPQ 543, 551 (Fed. Cir. 1985). Here, Applicants respectfully submit that it has not been established as to how one of ordinary skill in this art would reasonably expect to be successful or be motivated in referring to a reference directed to a food product, a skin disease-treating medicine, skin-protection, or a different usage of water-treatment in order to solve the problems associated with the art of the present invention (i.e., plant freshness). Thus, Applicants respectfully submit that a *prima facie* case of obviousness has not been established since not all requirements for a *prima facie* case of obviousness have been satisfied, including the requisite motivation and reasonable expectation of success.

Applicants also traverse the recited ratios are a matter of optimization. The Examiner also states that the motivation lies in determining the most effective compositions. However, none of the cited references discloses the cited ratios or recognize such ratios and the benefits thereof between the claimed components. No evidence has been provided that the ratios as claimed are a matter of optimization.

Thus, overall, Applicants respectfully submit that it is appropriate to argue that one of ordinary skill in the art would not refer to a reference belonging to a nonanalogous art in order to achieve the present invention. Though in the Office Action the Examiner refers

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to intended uses, Applicants respectfully submit that one of ordinary skill in the art would not be motivated in referring to any of the references in order to achieve the present invention because the references are not within the same field of endeavor as the present invention. Reconsideration and withdrawal of these rejections are respectfully requested.

More Unexpected Results Are Hereby Submitted

Applicants respectfully submit that the present invention has achieved unexpected results, whereby such results rebut any asserted *prima facie* case of obviousness (whether based on the modification of JP '010, JP '856, JP '707 or JP '185, or any other reference or combinations thereof).

Applicants herein enclose a Declaration pursuant to 37 C.F.R. § 1.132 by co-inventor Tadayuki Suzuki. Table 26 in particular establishes that the present invention is patentably distinct from the cited references (Applicants also request consideration of the ratios as shown). The plant freshness of the present invention is clearly shown as unexpectedly superior over the many comparative products (see Table 26).

Further, parts of the present specification and a previously submitted Rule 132 Declaration establish the unexpected advantages of the present invention have been experimentally confirmed. For instance,

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Tables 1 and 9 of the present invention compare inventive products 13, 49, 53, 54, 56, versus comparative products 10 and 30 of trehalose and gibberellin, respectively), wherein the claimed combination of component (A) and at least one of components (B)-(F) gives synergistic advantages of better growth and freshness conditions of various plants (see the experimental results in Tables 2 and 4). Applicants also request consideration of the previously submitted Rule 132 Declaration (attached to the reply of March 27, 2002).

Thus, the present invention has achieved unexpected synergistic advantages when using the claimed component (A) with at least one of components (B), (C), (D), (E) or (F). As a result of the above combinations, the claimed composition creates an improved freshness-keeping effect and safety over conventional compositions.

Applicants add that Applicants are not required to show unexpected results over the entire range of properties possessed by a chemical compound or composition. See, e.g., *In re Chupp*, 816 F.2d 643, 646, 2 USPQ2d 1437, 1439 (Fed. Cir. 1987); see MPEP § 2144.08. Evidence that the compound or composition possesses superior and unexpected properties in one of a spectrum of common properties can be sufficient to rebut a *prima facie* case of obviousness. *Id.* Applicants submit that, e.g., there are four points for the recited ratio between components (A) and (B) in the Declaration. Further, a comparative showing need not compare the claimed invention with all of the cited prior art, but only with the

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closest prior art. See MPEP §§ 716.02(b) and 716.02(e); see also *In re Fenn et al.*, 208 USPQ 470 (CCPA 1981). The comparative examples shown in the Declaration are just outside the claimed ranges.

Accordingly, Applicants respectfully submit that the present invention is patentably distinct from the cited references such that unexpected results rebuts any asserted *prima facie* case of obviousness. Reconsideration and withdrawal of all rejections are respectfully requested.

#### **Conclusion**

A full and complete response has been made to all issues as cited in the Office Action. Applicants herein request reconsideration of all evidence of patentability on record, including the arguments of patentability presented herein and the currently and previously submitted Rule 132 Declarations, as required by MPEP § 2144.08(III). Thus, Applicants respectfully request that a timely Notice of Allowance issue for the present case.

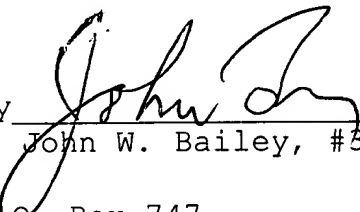
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Eugene T. Perez (Reg. No. 48,501) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

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If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

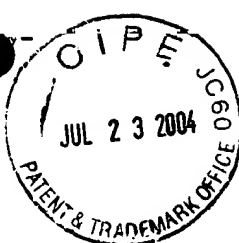
By   
John W. Bailey, #32,881

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Attachment: Declaration Under 37 C.F.R. § 1.132





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IN THE U.S. PATENT AND TRADEMARK OFFICE

Applicant: Tadayuki SUZUKI et al.

For: Freshness-keeping agent for plants

Serial No.: 09/744 678

Group: 1616

Filed: April 10, 2001

Examiner: A. Pryor

Attorney docket

No.: 0425-0821P

The Commissioner of Patents and Trademarks

Washington, D.C. 20231

DECLARATION UNDER 37 CFR 1.132

I, Tadayuki SUZUKI, declare as follows:

I am one of the co-inventors of the invention as claimed and described in the instant patent application. I have carried out additional tests, procedures and results of which are described below.

Additional examples and comparative examples were carried out in the same way as Example 2 of the instant patent application except for the effective components and their concentrations as shown in Table 26, hereto attached. Test results are shown in Table 25. It is noted that the combination of (A) with (B), (C), (D), (E) or (F) according to the claimed invention is superior to otherwise.

I hereby declare that all statements made herein of any own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine

Table 26 hereto attached

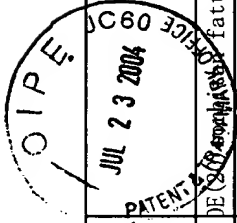


Table 26	Component B, C, D, EorF	Surfactant A	ratio	The number of days for the flowers being preserved			prior art
				chrysanthemum	carnation	rose	
Inventive product	B:Glucose 2.0%	DE(20)sorbitan fatty acid ester(alkyl=C18:1) 0.0001%	A/B=0.00005	9	9	7	
	B:Glucose 2.0%	POE(20)Sorbitan fatty acid ester(alkyl=C18:1) 0.001%	A/B=0.0005	9	9	9	
	B:Glucose 2.0%	POE(20)sorbitan fatty acid ester(alkyl=C18:1) 0.01%	A/B=0.005	11	10	9	
	B:Glucose 0.1%	POE(20)sorbitan fatty acid ester(alkyl=C18:1) 0.1%	A/B=1.0	10	10	9	
	C:Gibberellin(GA3) 0.1%	DE(20)sorbitan fatty acid ester(alkyl=C18:1) 0.0001%	A/C=0.001	9	9	8	
	C:Gibberellin(GA3) 0.0001%	POE(20)sorbitan fatty acid ester(alkyl=C18:1) 0.01%	A/C=100	11	11	9	
	C:Gibberellin(GA3) 0.00002%	POE(20)sorbitan fatty acid ester(alkyl=C18:1) 0.1%	A/C=5000	11	11	10	
	D:Silver thiosulfate 0.05%	DE(20)sorbitan fatty acid ester(alkyl=C18:1) 0.0001%	D/A=500	12	12	11	
	D:Silver thiosulfate 0.001%	POE(20)sorbitan fatty acid ester(alkyl=C18:1) 0.01%	D/A=0.1	10	10	10	
	D:Silver thiosulfate 0.00005%	POE(20)sorbitan fatty acid ester(alkyl=C18:1) 0.1%	D/A=0.0005	9	9	8	
	E:Aluminium sulfate 13-14H2O 0.2%	DE(20)sorbitan fatty acid ester(alkyl=C18:1) 0.0001%	A/E=0.0005	9	9	8	
	E:Aluminium sulfate 13-14H2O 0.05%	POE(20)sorbitan fatty acid ester(alkyl=C18:1) 0.01%	A/E=0.2	10	10	10	
	:Aluminium sulfate 13-14H2O 0.0002	POE(20)sorbitan fatty acid ester(alkyl=C18:1) 0.1%	A/E=500	9	9	8	
	F:Proxel 0.5%	DE(20)sorbitan fatty acid ester(alkyl=C18:1) 0.0001%	A/F=0.0002	9	9	7	
	F:Proxel 0.02%	POE(20)sorbitan fatty acid ester(alkyl=C18:1) 0.01%	A/F=0.5	10	10	9	
Comparative product	F:Proxel 0.001%	POE(20)sorbitan fatty acid ester(alkyl=C18:1) 0.1%	A/F=100	9	9	8	
	-	Tap water	-	5	5	3	
	-	Chrysal 2%	-	7	7	5	
	B:Glucose 2.0%	DE(20)sorbitan fatty acid ester(alkyl=C18:1) 0.0000	A/B=0.000005	4	4	3	
	B:Glucose 2.0%	POE(20)sorbitan fatty acid ester(alkyl=C18:1) 5.0%	A/B=2.5	2	2	2	
	B:Glucose 20.0%	OE(20)sorbitan fatty acid ester(alkyl=C18:1) 0.0001	A/B=0.000005	1	1	1	
	C:Gibberellin(GA3) 0.1%	DE(20)sorbitan fatty acid ester(alkyl=C18:1) 0.0000	A/C=0.0001	1	1	1	
	C:Gibberellin(GA3) 0.0001%	POE(20)sorbitan fatty acid ester(alkyl=C18:1) 2.0%	A/C=20000	2	2	2	
	C:Gibberellin(GA3) 1.0%	OE(20)sorbitan fatty acid ester(alkyl=C18:1) 0.0001	A/C=0.0001	1	1	1	
	D:Silver thiosulfate 0.05%	E(20)sorbitan fatty acid ester(alkyl=C18:1) 0.00002%	D/A=2000	6	6	5	
	D:Silver thiosulfate 0.001%	POE(20)sorbitan fatty acid ester(alkyl=C18:1) 6.0%	D/A=0.00017	1	1	1	
	D:Silver thiosulfate 0.2%	OE(20)sorbitan fatty acid ester(alkyl=C18:1) 0.0001	D/A=2000	4	4	3	
	E:Aluminium sulfate 13-14H2O 0.2%	DE(20)sorbitan fatty acid ester(alkyl=C18:1) 0.00002	A/E=0.0001	5	4	5	
	E:Aluminium sulfate 13-14H2O 0.05%	POE(20)sorbitan fatty acid ester(alkyl=C18:1) 60.0%	A/E=1200	1	1	1	
	E:Aluminium sulfate 13-14H2O 1.0%	OE(20)sorbitan fatty acid ester(alkyl=C18:1) 0.0001	A/E=0.0001	3	3	2	
	F:Proxel 0.5%	E(20)sorbitan fatty acid ester(alkyl=C18:1) 0.000002	A/F=0.000005	5	5	5	
	F:Proxel 0.0002%	POE(20)sorbitan fatty acid ester(alkyl=C18:1) 0.05%	A/F=250	6	6	5	
	F:Proxel 0.02%	POE(20)sorbitan fatty acid ester(alkyl=C18:1) 1%	A/F=50	1	1	1	
	F:Proxel 0.6%	POE(20)sorbitan fatty acid ester(alkyl=C18:1) 0.01%	A/F=0.017	3	3	3	
	B:Glucose 20%	Sorbitan fatty acid ester(alkyl=C18:1) 1%	A/B=0.05	1	1	1	JP54020010A
	C': brassinolides 0.0004%	DE(20)sorbitan fatty acid ester(alkyl=C18:1) 0.000	A/C'=0.25	2	2	1	JP02209801A
	D': semicarbazide 0.001%	Sorbitan fatty acid ester(alkyl=C18:1) 0.01%	D'/A=0.1	4	5	2	JP59189185A
	E:aluminium surfate 20%	POE(20)sorbitan fatty acid ester(alkyl=C18:1) 80%	A/E=4	1	1	1	JP55083707A
	F:ethanol 10%	Sorbitan fatty acid ester(alkyl=C18:1)10%	A/F=1	1	1	1	JP07291856A

The component C do not include the component C'.

The component D do not include the component D'.